

From wang!elf.wang.com!ucsd.edu!info-hams-relay Thu Mar 28 01:59:29 1991 remote  
from tosspot  
Received: by tosspot (1.64/waf)  
via UUCP; Thu, 28 Mar 91 05:18:23 EST  
for lee  
Received: from somewhere by elf.wang.com id aa01262; Thu, 28 Mar 91 1:59:28 GMT  
Received: from ucsd.edu by relay1.UU.NET with SMTP  
(5.61/UUNET-shadow-mx) id AA03942; Wed, 27 Mar 91 19:38:32 -0500  
Received: by ucsd.edu; id AA13018  
sendmail 5.64/UCSD-2.1-sun  
Wed, 27 Mar 91 13:16:59 -0800 for brian  
Received: by ucsd.edu; id AA12995  
sendmail 5.64/UCSD-2.1-sun  
Wed, 27 Mar 91 13:16:49 -0800 for /usr/lib/sendmail -oc -odb -oQ/var/spool/  
lqueue -oi -finfo-hams-relay info-hams-list  
Message-Id: <9103272116.AA12995@ucsd.edu>  
Date: Wed, 27 Mar 91 13:16:48 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams-relay@ucsd.edu>  
Reply-To: Info-Hams@ucsd.edu  
Subject: Info-Hams Digest V91 #244  
To: Info-Hams@ucsd.edu

Info-Hams Digest                      Wed, 27 Mar 91                      Volume 91 : Issue 244

Today's Topics:

        "Business use" and MARS  
        2m/70cm comparison - revised chart  
        a few fundamental questions about RF signals  
Any \_420\_ - 450 MHz coverage available? (2 msgs)  
        IC-24at Sale?  
        Looking for info on a specific freq. band  
        SWL Mailing List Help Needed  
The RAMSEY FM-10 STEREO TRANSMITTER KIT REVIEW (Longish)  
        WPX Scoring

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 27 Mar 91 20:37:33 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: "Business use" and MARS  
To: info-hams@ucsd.edu

Is MARS traffic subject to less restrictions regarding content than ordinary or regular ham radio? For example, postulate a husband-and-wife who each have ham licenses, speaking over the air about topics such as the details of the wife's running a family business while the husband is on a trip away from home. I am under the impression that this would be considered improper use of ham frequencies. Take the same conversation, but put it on MARS frequencies, with the husband in the military stationed overseas and the wife stateside (with the actual radio operation being under the control of MARS operators), and I am under the impression the content is perfectly OK.

Am I wrong in these impressions (either one or both)? If so, please post corrections...

Regards, Will

-----  
Date: 27 Mar 91 20:25:39 GMT  
From: usc!rpi!zaphod.mps.ohio-state.edu!sol.ctr.columbia.edu!  
cunif.cc.columbia.edu!cunib.cc.columbia.edu!mig@ucsd.edu  
Subject: 2m/70cm comparison - revised chart  
To: info-hams@ucsd.edu

The TH-77 appears to have all of the features of the 75 and then some! It has a backlit keypad, as well as dual-band repeat, 800 Mhz RX, and is modifiable for extended TX as well as RX. It is VERY small, and appears to have good sensitivity and a GOOD compact antenna. The speaker seems to distort at moderate volumes, though :-(. Oh well, I usually use my MFJ mini speaker-mic anyway!

\* \* \* \* \* ===== Meir Green  
\* \* \* \* \* ===== mig@cunib.cc.columbia.edu  
\* \* \* \* \* ===== N2JPG

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Date: 27 Mar 91 20:30:03 GMT  
From: usc!zaphod.mps.ohio-state.edu!sol.ctr.columbia.edu!cunif.cc.columbia.edu!  
cunib.cc.columbia.edu!mig@ucsd.edu  
Subject: a few fundamental questions about RF signals  
To: info-hams@ucsd.edu

In article <9C44BAE82EFF600437@uncg.bitnet> MOSIER%UNCG.BITNET@ncsuvn.ncsu.EDU

(Steve Mosier) writes:

```
>
>> Both light and radio are electromagnetic waves,
>> but the vast difference in frequency gives them vastly different properties.
>> Because of this, the technologies for generating and detecting the different
>> waves are so different that the similarity is hard to see.
>>
>> There's another realm between radio and light, the infrared. IR is
>
>It might be useful to add here that astronomers and atmospheric scientists
>frequently build heterodyne infrared receivers. Mike Mumma & colleagues at
>NASA/Goddard have pioneered this work. Very similar technology to heterodyne
>radio receivers, except for the differences of mixing and detecting. But
>infrared detectors are still solid state diode-type devices. So... do you
>call infrared RF or light? The point is that there is a somewhat smooth (or
>maybe I should say "piecewise continuous" for you mathematician-types)
>transition between RF detection and light detection. Step functions along the
>way, but not just one big step function between 4e10 and 5e14 Hz! And I
>wouldn't necessarily say that the similarities are hard to see.
>
>steve W3GRG
```

What about putting a transformer and an audio transducer on an HF or MF or LF rig? Could we have QSOs using ultrasonics?

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* * * * * ===== Meir Green
* * * * * ===== mig@cunib.cc.columbia.edu
* * * * * ===== N2JPG
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Date: 27 Mar 91 19:30:57 GMT  
From: ENUXHA.EAS.ASU.EDU!crawford@ucbvax.berkeley.edu  
Subject: Any \_420\_ - 450 MHz coverage available?  
To: info-hams@ucsd.edu

Not having purchased any equipment for several years, would someone be willing to answer the following question:

What, if any, HT's/Mobile's/Base 70cm radios out there can be modified for the FULL 420-450 MHz coverage?

Comments appreciated, either posted or directly to me.  
Thank you.

-----

Brian Crawford	INTERNET (current):	crawford@enuxha.eas.asu.edu
PO Box 804	(permanent):	crawford@stjhmcc.fidonet.org
Tempe, Arizona 85280	FidoNet:	1:114/15.12
USA	Amateur:	KL7JDQ

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-----  
Date: 27 Mar 91 20:40:08 GMT  
From: usc!wuarchive!zaphod.mps.ohio-state.edu!sol.ctr.columbia.edu!  
cunxf.cc.columbia.edu!cunxb.cc.columbia.edu!mig@ucsd.edu  
Subject: Any \_420\_ - 450 MHz coverage available?  
To: info-hams@ucsd.edu

In article <9103271930.AA14644@enuxha.eas.asu.edu> crawford@ENUXHA.EAS.ASU.EDU  
(Brian Crawford) writes:

>What, if any, HT's/Mobile's/Base 70cm radios out there can be modified  
>for the FULL 420-450 MHz coverage?  
>-----

>Brian Crawford	INTERNET (current):	crawford@enuxha.eas.asu.edu
>PO Box 804	(permanent):	crawford@stjhmc.fidonet.org
>Tempe, Arizona 85280	FidoNet:	1:114/15.12
>USA	Amateur:	KL7JDQ

>-----

My TH-75 does that now, and I am pretty positive that the newer TH-77 will,  
too. These are Kenwood dual-band HTs.

\* \* \* \* \* ===== Meir Green  
\* \* \* \* \* ===== mig@cunxb.cc.columbia.edu  
\* \* \* \* \* ===== N2JPG

-----  
Date: 27 Mar 91 17:07:37 GMT  
From: sdd.hp.com!hp-col!col!kenw@ucsd.edu  
Subject: IC-24at Sale?  
To: info-hams@ucsd.edu

I suspect that ICOM will eventually drop the IC-24 from their line, as  
the new IC-W1 dualbander will probably be announced at Dayton. What you  
are seeing are folks unloading inventory.

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Date: 27 Mar 91 19:59:36 GMT  
From: sdd.hp.com!zaphod.mps.ohio-state.edu!ncar!noao!stsci!tullos@ucsd.edu  
Subject: Looking for info on a specific freq. band  
To: info-hams@ucsd.edu

Sorry for such wide distribution (for anyone it might bother)...

I'm looking for information on who might be broadcasting

between 174 MHZ and 199 MHZ.....

I just bought a wireless mike system which uses this frequency band (10 different available channels), and was wondering if I would be competing with anything??/??

please mail to tullos@stsci.edu

thanks  
calvin

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Date: 27 Mar 91 20:59:05 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: SWL Mailing List Help Needed  
To: info-hams@ucsd.edu

I'm hoping this posting to the "hams" group gets to someone who is in some way in control of or runs the "SWL" mailing list.

This list gateways rec.radio.shortwave for those of us on the Internet who have no USENET access, and is one of those operated by a "listserv" program. Unfortunately, the program appears to not be working properly in regard to mail to me, or my host, or my domain, and I need to get in touch with a human who can manipulate the list address data and get my name added to the list and insure mail from the list flows to me.

I used to get mail from this list; in fact, I was one of the "charter members" from its inception. Unfortunately, later on the newsgroup was set up, which helped damage the list by luring many participants away and then the gatewaying would periodically fail or shut off, leaving those of us on the list cut off. Late last year, all mail from that list disappeared here and I've never been able to get reconnected to it.

I've been trying, periodically, to send "help" and other requests to the listserv using the address: listserv@cuvmb.cc.columbia.edu (due to the vagaries of Internet mail, I actually have to use this relayed format: listserv%cuvmb.cc.columbia.edu@columbia.edu instead). I never get any reply to these tests, however.

I have this address for the list itself:  
swl-l%cuvmb.cc.columbia.edu@columbia.edu

Are these addresses still valid? Are there FTPable archives of the list traffic available, or can someone help me get to a responding listserv that will send such archive files? Can someone out there force my address onto the list distribution and manipulate the address format until list

mail actually gets to me?

Regards, Will  
wmartin@stl-06sima.army.mil

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Date: 27 Mar 91 06:16:49 GMT  
From: usc!rpi!zaphod.mps.ohio-state.edu!rphroy!cfctech!sharkey!lopez!  
flash@ucsd.edu  
Subject: The RAMSEY FM-10 STEREO TRANSMITTER KIT REVIEW (Longish)  
To: info-hams@ucsd.edu

WB8EOH Gizmo Report  
(Very Long)

The Ramsey FM-10 is a low power FM stereo transmitter kit that is easy to build and has many practical applications around the home and ham/swl shack. After living with one for several weeks, I could never go back to life before I acquired this little "freedom machine". The audio quality and stability of the signal give the unit many HI FI type applications, and indeed I am already planning to buy another unit to patch into the Audio/Video system.

Egad, you mean you have to BUILD this thing?

When my XYL saw that this package I had spent fifty bucks on consisted of a couple of polyethylene bags full of plastic bugs and little metallic button like pieces, she shook her head in dismay. Though I tinker with computer and radio gizmos all day long, I will admit that the past 20 years have seen me become an "appliance operator" more content to sit back and PLAY than get in there and tear into the circuitry, much less build something from scratch. Well, the folks at Ramsey have honed the art of kitbuilding, and even a klutz like me CAN have the satisfaction (like in the old Heath ads) to say "I built it myself".

Constructing the FM-10 was in part a happy trip down memory lane. In my distant youth, one of my happiest memories was the construction and operation of an Allied Radio Knight Kit #83Y706 three tube AM Phono Oscillator. This wonderful little gadget paved the way not only for my interest in Ham radio, but also got me interested in broadcasting, a field which put bread on the table for many years. Well in the more than 30 years between the two kits, things sure have changed.

First right off, don't even think about dragging out the old Weller soldering gun and the old roll of Kester solder. First thing I had to do was borrow a low wattage iron, and get some super thin solder. The

Lifetime Supply of solder I bought in 1968 (five pounds) was fine for antenna work, and gobbing up audio connectors, but the old stuff is actually WIDER than many of the separate connections on the FM-10 PC board. EGAD these components are TINY.

Kudos to Ramsey for the way their whole concept. The manual is very well written. My only problem was I did not get the companion booklet on how to build a kit (the generic HOW TO SOLDER book). Well I hoped that the instructions that came with my 1957 Knight Kit still applied, because I remember them. Heat the component, don't glob it all over the place, and try not to melt the PC board. I was on my own to develop a technique. Ramsey even takes this into account by having you mount some of the larger "landmark" components first, namely three RCA jacks (left and right audio and the antenna jack).

Now I wanted this thing to work. I would not be able to face Elaine if it became necessary to send the completed unworking mess back to Ramsey for their \$18 an hour bail-you-out plan. So I took absolutely extraordinary steps. With a (borrowed) digital meter, I measured every resistor, even though Ramsey gives the color code for each one in the manual as you install it.

One of the nicest touches is the GIANT print of the PC board, upon which you place all the components in the same place they will go in the final kit. I did this with most of the components, except for the multitude of .01 capacitors, which I left neatly together (Ramsey uses a masking tape type type medium for keeping similar value components together).

The scariest moment for me was soldering in the 18 pin DIP socket that houses the heart of the kit, a ROHM stereo transmitter on a chip. We are talking TEENY TINY little pins separated by seeming microns. EGAD. After each dot of solder, I held the PC board a quarter inch from my eyeballs to make sure there were no solder bridges. And I measured all the components with the Digital meter a second time before installing each one. You probably won't take these extraordinary steps, which make the simple kit an all night project.

But it was a FUN night. The scent of melting tin/led/rosin... The occasional absolutely PERFECT joint... Kitbuilding is not only an art, it is positively a cosmic experience. It is relaxing, creative, and there is the anticipation of all the wonderful things you will do with your kit upon completion.

3:25AM

Ah. The moment of truth.

Connect the nine volt battery, push the power switch, and TUNE around on the FM radio to find the carrier.

And I found.....

NOTHING.

It did not work.

Now this is where we separate the men from the boys. How well you manage not to throw the thing through the window.

So I went back through the whole manual. checked EVERY joint. Eyeballed EACH component. I could find NOTHING wrong.

Elaine came into the shack as I was holding the PC board. I hated to admit defeat. But I told her it did not work.... yet.

She held the board and looked at it with wonder. She could not believe that I had placed each of the little parts in their places. She told me I would figure out what was wrong with it.

The next day, I went through the manual again. I took voltage measurements, and found all the proper voltages on the chip and RF amplifier. I was stymied.

Then I looked very closely at the OTHER side of the board. I stared at the ROHM chip, which Elaine had called a "train trestle". Hmmm. I wonder if I pushed on the chip if it would go in any farther.

Push. Click. It snapped into place.

I pushed the power switch, turned on the FM radio, and found a nice clean carrier at 102.3, with the stereo light blazing away in pure clear silence.

Hot DAWG it WORKS!

First thing I did was to move the frequency. Since it was transmitting on top of one of the local stations, this seemed in order. Ramsey's manual stresses the importance of selecting a clear channel so as not to bring the wrath of neighbors and the FCC. Up here in the boonies, there is a tremendous clear swath from about 98 Mhz to 102 mhz. (I plan to pouplate it).

The next thing required is adjustment of the subcarrier frequency and stereo balance. Surprisingly mine was already right on for the subcarrier adjustment, and I found out that this adjustment is



actually pretty critical. There is a test point if you have a freq counter to get it exactly on 19khz, but it can be done by just turning the little variable capacitor until the stereo light goes on.

The "stereo balance" control takes a bit of explaining. This is not a simple LEFT-RIGHT adjustment, but actually adjustment of the level of left MINUS right. It is more of a separation adjustment, and also seems to have a real effect on tonal quality. It took quite a bit of diddling to get it right, and there seems to be some interaction between the two controls, as the stereo light will go out just when you think you have the sound right... The end result is a surprising quality signal with amazing separation. However, one thing to make note of... The RM-10 is designed with NO audio level controls. This is a bit of an oversight, because when using it with components that have fixed level output, the unit is prone to overmodulation. You MUST be able to lower the audio level of whatever it is you are feeding to the transmitter, as it is too sensitive with EVERY component I tried connecting direct. Once you get the level under control, though, it actually sounds better than many local FM stations because the signal is not run through all sorts of "Enhancers" that broadcasters use to be the loudest thing on the band. I did find though that adding an audio limiter (an old DBX 119) really helped tame the overmodulation problem.

I finished the project by mounting it in the \$12.95 Ramsey Kit cabinet. OK, this is where the Ramsey guys make a few bucks. It does give the kit a finished look, but I would have to say that this is a bit dear for a simple plastic case. I think the next one will be built into a VIDEOTAPE plastic case or other cheapo cabinet.

One oversight is that there is no hole in the cabinet for the whip antenna which mounts to the circuit board. Ramsey suggests constructing a dipole or groundplane antenna, which I did initially in the final installation in my hamshack. I have since stopped using this antenna however (more on why later)

#### OK NOW WHAT CAN I DO WITH THIS LITTLE GADGET

Ramsey gives many practical applications in the manual. I found the unit handy for listening to MDS stereo TV on a little sony walkman in the wee hours without having to run headphone cords. Remote listening of ANYTHING on your main stereo system in any room in your home by just tuning the radio is just ONE thing the kit can be used for.

My own application is a bit unique. I have the FM-10 in my ham/swl shack, and it is connected to a stereo mixer, to which I have several receivers patched in. I am a communications junkie and often in the shack I listen to several things at once. The only problem is that

one can not stay in ones hamshack all day long. Well with the FM-10 and a pocket stereo receiver, you can monitor whatever you wish in your home or yard. Now since the Ramsey Kit is a STEREO transmitter, you can do what I do (if you are insane enough) I have a 2 meter rig on the LEFT channel, scanner on the RIGHT channel, and the HF rig panned dead center. The ears and the brain manage to sort it all out. I feel sorry for any of the neighbors who happen to tune in when in this configuration (when I am in my active monitoring mode).

#### No Code, No License, No Kidding It's LEGAL

Now speaking of neighbors, lets focus for a moment on the LEGALITY of using this kit under part 15 of the FCC rules. In 1989, the FCC revised part 15, changing the way the measurements are taken to determine if a device is legal. The new standard is: 250 microvolts per meter. A calibrated Field Strength Meter is needed to make sure the signal complies with this regulation (FCC rule 15.239). Beyond this, part 15 requires that the unit produce no interference to licensed stations. Basically those are the rules. What you put on the device is YOUR business. It comes under the same type of regulation as cordless phones, baby monitors, and walkie talkies. the only difference is that this unit operates in a BROADCAST band rather than a semi-hidden part of the spectrum like the others.

The Ramsey manual has a chart that shows that even if one complies FULLY with this measurement, the transmitter has a surprising range. Doing the math of the inverse square law, we find that there is still .41 microvolts at 5000 feet from the transmitter, nearly a mile. Since the Ramsey kit has a FINAL AMPLIFIER, it is much more powerful than a similar kit sold by another manufacturer which uses the chip output only (that one can be heard well within only 20 feet). I found that the kit with a dipole antenna cut to the operating frequency has TOO MUCH range for my own use. Those who wish to "Play DJ" might be interested in running the recommended dipole antenna (making CERTAIN they make the Field Strength Measurement) to get the maximum range out of the unit. I found that just a small piece of wire gives me all the coverage in my home that I need.

For someone interested in providing a broadcast type service, to a college dorm, appartment complex or local neighborhood (Legally the signal can be quite loud over a quarter mile away) It can be legally done under part 15 of the present FCC rules (as ammended in June of 1989) by simply adding a mixer, microphone, and sound sources to the Ramsey Kit.

An application I am considering is connecting the audio output of my new satellite system and tuning it to the BBC audio feed and just leave it run that way when I am not using the dish for other purposes.

This way I can enjoy BBC in FM quality and so can my immediate neighbors. Now before the flames begin, please remember that copyrights, etc, do not apply to part 15 transmissions. You can put on ANYTHING you want. Just as if you were listening on closed circuit speakers. The only difference is that your immediate neighbors CAN also enjoy the transmissions as well.

FCC RULE 15.215(a) Says: "Unless otherwise stated, there are no restrictions as to the types of operations permitted under these sections." This general provision \*APPEARS\* to leave you free to use the fm transmitter for just about ANY type of operation you desire, including becoming a "legal low power broadcaster".

Now the nitty Gritty:

RAMSEY FM-10 FM STEREO TRANSMITTER KIT

Price: Circuit Board and Components -- \$29.95  
Cabinet (black plastic) -- \$12.95

Shipping add 6%.

Ramsey Electronics  
793 Canning Parkway  
Victor, NY 14564

(716) 924-4560 (Voice)  
(716) 924-4555 (FAX)

- o Operates from internal 9 volt battery
- o Choice of onboard whip or external antenna
- o Stable output, from 88 to 108 MHz
- o Left and Right channel RCA line audio input jacks
- o Use with Mixers, cassette or CD decks etc.
- o Clear, step-by-step assembly instructions
- o Helpful information on FCC rules included

TYPICAL USES:

- o Extension of home stereo system without wires
- o Student-operated school radio station
- o Home or neighborhood radio station
- o College dorm favorite music broadcast service
- o Listening aid for auditoriums, churches

NOTE1: I am in NO WAY affiliated with Ramsey Electronics other than

being one of their very satisfied customers.

NOTE2: If you plan to use the kit as a "broadcasting" service, I would STRONGLY SUGGEST you have the output level CERTIFIED by an engineer ascertaining for SURE it is no more than 250 microvolts per meter. This kit has an almost amazing range, and I imagine it could very easily exceed LEGAL SPECIFICATIONS if you are not careful.

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=Marquette MI: It's Not the END of the world, but you can see it from here=  
== Gary Bourgois flash@lopez (rutgers!sharkey!lopez!flash) GWN UPLink ==  
== 3.950 Nationwide Amateur Radio Nightly after 0200z=Learning Channel ==  
===== WB8EOH = The Eccentric Old Hippie = WB8EOH =====

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Date: 27 Mar 91 19:26:58 GMT  
From: sdd.hp.com!zaphod.mps.ohio-state.edu!mips!twg.com!sawyer@ucsd.edu  
Subject: WPX Scoring  
To: info-hams@ucsd.edu

I just got around to reading the rules on WPX last night (never having worked this one before), and what occurs to me is that it is heavily slanted toward people with good 40 meter beams:

- contacts on 160, 80 and 40 count double those on 20, 15, or 10;
- multipliers are good on only one band.

This tells me that the strategy is to stay with the band that has the best propagation, irrespective of where you may be low at the moment. All other things being equal, get on to 40. And don't even bother fooling with 80 or 160. Thus I would expect there to be a lot of action on 40 and 10, and not much elsewhere except maybe 15/20 at local sunrise and sunset. For those of you who have worked WPX before, is this the way it really works out? It's a quirky set of rules, what with the number of U.S. prefixes counting for multiplier credit (something approaching 930 by my arithmetic). If anybody on the net has studied WPX strategy, I'd be very curious what sort of strategy recommendations you might be willing to share BEFORE the 'test! I got a real evil eye from my XYL when I mentioned the possibility of working this contest at dinner last night, but even if I don't get to do it I'd still be curious what the right approach might be. It's obvious that you treat this one very differently than CQWW or the ARRL DX contests.

-AA6KX

night, but

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Date: 27 Mar 91 18:21:50 GMT  
From: sdd.hp.com!elroy.jpl.nasa.gov!suned1!lev@ucsd.edu  
To: info-hams@ucsd.edu

References <1991Mar21.224821.28500@cunxf.cc.columbia.edu>,  
<1991Mar26.042459.13988@sq.sq.com>, <132959.13775@timbuk.cray.com>  
Reply-To : lev@suned1.UUCP (Lloyd E Vancil)  
Subject : Re: Can you really learn code from tapes?

I have taught code to many people who were stuck big time at one of the various "barriers" in the trek from 5 to 20wpm. One of my students, WB7WOW, went from a "I can't learn code" whiner to a CW traffic net addict in a matter of 6 months.

My secret?

Don't have one. I use computer generated code tapes with a difference. On side one are 5 letter code groups, on the other plain language QS0s. Here is the difference; all characters are transmitted at about 22wpm and the spacing is set up so that the groups come 5 per minute. On the back the QS0s are at the same wpm rate while the characters are at the same 22wpm.

There seems to be a physical reason for this. The code changes aspect as the speed increases and the letter gets shorter and shorter. The recognition habits set up by learning the slower code and trying to get faster amount to learning the code 5 times (the classic barriers 8.5, 13, 18, 23 or there about). With the fast letters approach, recognition of characters at the slower speeds seems to come faster (observation here no tests).

All of this came out of an Army study I heard about from an old friend W7AJ, a real old timer. The Army looked into teaching methods during and after WWII. They found they graduated about 40% more operators at the 20wpm level if they taught the letters at 20 wpm instead of staring them at 5 wpm and trying to bring the speed up. Their approach works, and has been long know about.

I am,  
Sincerly,  
WB7NVM,AI7J,AA6NX

--  
\* suned1!lev@elroy.JPL.Nasa.Gov sun!suntzu!suned1!lev  
lev@suned1.nswses.navy.mil +  
+ \* S.T.A.R.S.! The revolution has begun! \*  
----- My employer has no opinions. These are mine! -----  
-----

Date: 27 Mar 91 18:26:35 GMT  
From: swrinde!elroy.jpl.nasa.gov!sdd.hp.com!zaphod.mps.ohio-state.edu!  
pacific.mps.ohio-state.edu!linac!att!cbnews!cbnewsm!jeffj@ucsd.edu  
To: info-hams@ucsd.edu

References <1991Mar26.042459.13988@sq.sq.com>, <132959.13775@timbuk.cray.com>,  
<948@nddsun1.sps.mot.com>.ed  
Subject : Re: Can you really learn code from tapes?

In article <948@nddsun1.sps.mot.com> markm@nddsun1.sps.mot.com (Mark Monninger)  
writes:

>In article <132959.13775@timbuk.cray.com> wws@raphael.cray.com (Walter Spector)  
writes:

>>In article <1991Mar26.042459.13988@sq.sq.com>, rph@sq.sq.com (Pontus  
>>

>> ...lots deleted...

>>Here in California, there is a station which

>>sends out code practice 24 hours a day at 7100khz (content isn't very

>>interesting for me though - mostly bible psalms.)

>> ...more deleted...

My wife and I used Super Morse 3.16 on my IBM PC to learn the code. It's  
a pretty good program does have it's quirks though. Sometimes the letter and  
word spacing is a little off. I still found it to be much better than the code  
tapes that I bought with "Tune in the World". We used the program in our morse  
code class and for the novice code test. I still use it to practice most nights  
until I get my antenna and HF rig on the air.

--

Jeff Jones KC6SKV/KT | Prediction is very difficult, especially  
UUCP uunet!seeker!jeffj | about the future.  
Infolinc BBS 415-778-5929 | Niels Bohr

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End of Info-Hams Digest

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